The Diagnosis of Carcinoma and Benign Cysts of the Breast

TO THE EDITOR: Dr. de Groot's paper, "Diagnosis of Carcinoma and Benign Cysts of the Breast—The Value of Needle Aspiration" [West J Med 122:99-103, Feb 1975] makes a valid case for a simple and useful procedure. However, no paper on diagnosis of carcinoma of the breast can ignore the most important contribution to the diagnosis of breast cancer in our medical generation. The use of x-ray examination of the breast, and perhaps more particularly the refinement of xeroradiography, has eliminated a good deal of the guess work which Dr. de Groot appears to accept in his paper.

He states: "If a carcinoma is so small that it escapes detection by the examining finger even when attention is directed to the specific area, a question that comes up is how one could have detected so small a lesion elsewhere in the same or the other breast, or at another time." These occult or nonpalpable cancers are the special province of mammography. Frankl[1] found 105 occult cancers out of 13,912 examinations. This represented about one-third of all cancers detected by xeroradiography. These occult cases were the more favorable ones by a vast margin. Occult cancers were associated with only 28 percent positive nodes as compared with dominant mass cases which were associated with 51 percent positive nodes. The number of negative biopsies for carcinoma (false positives) was 40 percent for radiologic studies as compared with 76 percent of biopsies based on physical findings. J. N. Wolfe[2] reported a similar incidence of occult carcinoma found on xeroradiographic examination. He found 30 percent occult carcinomas out of 462 cases of carcinoma. Thus the "question" of detecting the small or nonpalpable lesion has a very clear answer in the use of this valuable modality.

Dr. de Groot also suggests that in evaluating the borderline between lumpiness and discrete masses, the choice rests between repeated biopsies and bilateral mastectomy. This is an area in which mammography is of assured value. He also states that the modern sophisticated patient is used to having everything that is removed from her body sent to a pathologist. This same modern patient is aware of the value of mammography, and will probably request the procedure if her physician should fail to do so.

A tabulation of the clinical indications for mammography will encompass virtually all of the problem cases enumerated by Dr. de Groot. Such indications include fibrocystic disease and the diffusely lumpy breast, prior biopsy—especially with associated thickening, dominant mass—with particular reference to an unsuspected additional lesion in either breast, nipple discharge or breasts so large as to make physical examination unreliable. Among increased risk patients are those with prior mastectomy, family history of breast cancer, and the nulliparous or late parity patient. In summary, mammographic examination deserves a major role in diagnostic evaluation of the breast.

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REFERENCES

1. Frankl G: Xeroradiographic detection of occult carcinoma of the breast. Supplement to exhibit presented at the 60th annual congress of the American College of Surgeons, Miami, Oct 21, 1974
2. Wolfe JN: Analysis of 462 breast carcinomas. Am J Roent 121:846-853, Aug 1974

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The Author Replies

IN THE EVALUATION of a patient who presents with a suspected cyst, mammography does play a role, as I did indicate in my paper. I am, therefore, somewhat surprised to hear Doctor Engle state that I "ignore" this modality. If I did not discuss mammography in detail, it was probably because the question was not whether clinical evaluation could replace mammography, but rather whether, when dealing with cysts, excisional biopsy can be replaced by noninvasive methods of diagnosis (of which mammography, next to palpation, is one) followed by needle aspiration.

There are, however, a number of practical questions which mammography cannot answer, in spite of the understandable but nonetheless only seemingly logical conclusion that, if mammography can detect occult cancers, it should be able to give even clearer answers about masses at a palpable stage. This is partly because of the nature of the problems involved, which mammography simply cannot be expected to solve, and partly because of the frequency with which these problems present themselves.

As an introduction, and because there is some overlap with questions which arise when dealing with cysts, I would like to point out that even the routine evaluation of "normal" breasts still mostly deals with palpable masses, in spite of the indeed amazing ability of mammography to discover malignancies which the human finger cannot even

begin to feel. This is partly due to the fact that the percentage of false positives and false negatives is at least 5 percent, but mainly because, for a number of practical reasons, mammography, at the present time at least, cannot serve as a mass screening method. Palpation, by the patient as well as the physician, thus is still our main line of defense, and is therefore an art which we should keep alive and cultivate as much as possible.

There is moreover the ever present problem of deciding what is merely an increase in density of a normal breast and what is a mass. Even completely normal tissue is occasionally by patients, and sometimes even by physicians, interpreted as a mass, usually when the lower, pendulous portion of a breast is examined with the thumb in front and the index and middle finger behind, whereby the mere thickness of the tissue grasped is the source of error.

The breast is unique in posing these dilemmas, and with such frequency, and because it is impractical and even not without hazard to perform mammography every time these problems arise, which is often several times in one year, they frequently have to be answered on the basis of clinical findings and judgment only.

When dealing with a suspected cyst, I agree that mammography, at least at the first presentation, is usually indicated, to confirm the diagnosis of fibrocystic disease, to closely evaluate the remainder of the breast tissue and, as far as the presenting mass is concerned, to confirm the clinical impression that the mass as a whole is a cyst and not one solid mass. The coexistence of a carcinoma with a cyst at the same time *and* in the same location would seem rather coincidental, and is in reality indeed extremely rare. The presence of a nonpalpable occult cancer, although of course not excluded, would seem even less likely.

There are, however, as mentioned above, a number of practical problems, which mammography cannot be expected to answer.

First of all there is after any aspiration the necessity of verifying that the mass has completely disappeared. If a mass does persist, a normal mammogram taken prior to aspiration obviously does not mean that the mass can be ignored.

Furthermore, when the area is rechecked after a few weeks, to see if reaccumulation of the cyst has taken place, it is clear that again only palpation can answer that question. Finally, if within several months another cyst, elsewhere in the breasts, presents itself, mammograms will generally not be taken again, and the question of a possible malignancy will therefore entirely have to be settled at the palpable level.

In summary, in spite of the truly valuable contributions of mammography to the detection of breast cancer, its findings always have to be supplemented with clinical observations; moreover, when dealing with cysts, and also during the routine evaluation of breasts, a number of practical questions arise which can be solved only by evaluating physical findings with the aid of expertise, experience and judgment.

These are faculties which are indeed not measurable and are rather subjective—which however does not make them synonymous with "guesswork."

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Surreptitious Knuckle Cracking

TO THE EDITOR: As a surreptitious knuckle cracker, I was intrigued by the article by Swezey and Swezey in the May issue of the JOURNAL (West J Med 122:377-379, May 1975).

It would seem, from the data obtained, that knuckle cracking may be a means of preventing degenerative arthritis of the metacarpal-phalangeal joints. Perhaps a study involving a larger group of subjects would help elucidate this point.

Conceivably, then, surreptitious knuckle cracking might be a healthful practice which would avoid "the chief morbid consequence of knuckle cracking" and should be generally encouraged.

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More on Laetrile

TO THE EDITOR: Despite well-meaning attempts to dissuade people from using Laetrile by using rational argument, nothing but failure can be expected from these efforts.

The use of coercive means to attempt to enforce these official points of view produces an unfortunate opposite effect. Cancer victims and their families almost universally respond by accusing organized government and organized medicine of conspiracy. The bumbling attempts to present a unified front contribute to this interpretation.

By making Laetrile into "forbidden fruit" this